

CLAIMS

1. Method of storing and/or transporting *in vitro* two-dimensional cell cultures which comprises the following steps:
- 5 a) coating a cell culture that is immobilised on an asymmetric support with a gelatine solution in culture medium at a concentration of between 1 and 5 %, said cell culture comprising cells in suitable functional state
- 10 b) solidifying the gelatine added to the support at a temperature of between 15 and 25°C, and
- c) storing and/or transporting the cell culture at a temperature of between 15 and 25°C for a period of up to 96 hours
- 15 2. Method according to claim 1, which comprises the additional steps:
- a) liquefaction of the gelatine,
- b) elimination of the gelatine and substitution of same
- 20 by a culture medium, and
- c) incubation of the culture.
3. Method according to the preceding claims, characterised in that the two-dimensional cell culture is
- 25 differentiated, polarised and is functionally active.
4. Method according to claim 3, characterised in that the cell culture is selected from: Huvec cells, grown to confluence on a collagen support and differentiated Caco-2
- 30 cells, or any other type of cells capable of growing in single layers such as fibroblasts, tumoral, hepatic, endothelial cells, etc.
5. Method according to the preceding claims,
- 35 characterised in that 2.5% gelatine solution is used.

6. Method according to the preceding claims, characterised in that the gelatine is solidified at a temperature of between 15 and 25°C, for a period of
5 between 30 minutes and 12 hours.

7. Method according to the preceding claims, characterised in that the asymmetric support is a transwell-type support.
10

8. Method according to the preceding claims, characterised in that the gelatine liquefaction is performed between 35 and 40°C for a period of 1 to 4 hours.
15

9. Method according to claim 8, characterised in that the gelatine liquefaction is performed at 37°C.

10. Method according to the preceding claims, characterised in that the subsequent incubation of the culture is performed at between 35 and 40°C for a period of between 1 hour and 8 days.
20

11. Method according to claim 10, characterised in that
25 the culture is subsequently incubated at 37°C.

12. Kit for storing and/or transporting *in vitro* two-dimensional cell cultures according to any of claims 1-11, comprising:

30 (i) an asymmetric support, and
(ii) a gelatine solution in culture medium at a concentration of between 1 and 5%.

13. Kit, according to claim 12, characterised in that
35 the asymmetric support is a transwell-type support.

There follow 1 sheet of drawings numbered correlatively.